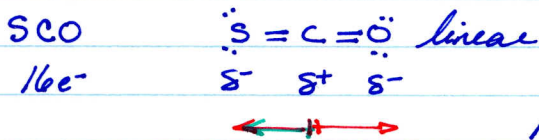
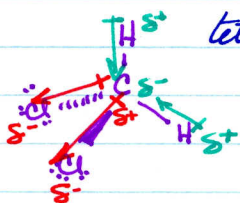
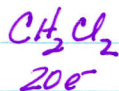


# POLAR MOLECULES



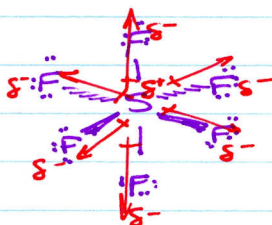
POLAR MOLECULE

Dipoles act in opposite directions But they are of different strengths & thus do not cancel.



tetrahedral

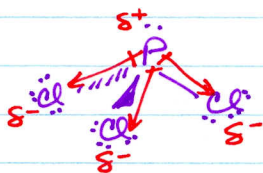
POLAR MOLECULE



octahedral

NON-POLAR

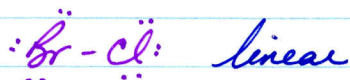
← all the bond dipoles cancel each other



trigonal pyramidal

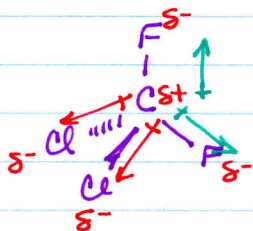
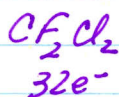
POLAR

← bond dipoles are equal but they are all pulling to one side of molecule (bottom)



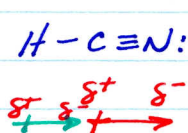
NON-POLAR

← The difference in electronegativity is approx. 0.1. This makes the bond essentially non-polar.



tetrahedral

POLAR



linear

POLAR

← dipoles act in same direction



NON-POLAR ← why?